ATTACHMENT A

Marked-up version showing changes to: Page 5, line 19, to page 6, line 2.

FIG. 1 shows a cut away side view of the reaction vessel 14 showing a stack of vials 24 progressing through longitudinal reaction chamber 32. FIG. [1 also] 3 shows an electronic heating jacket 102 encompassing chamber 32. FIG. 3 further shows jacket 102 in combination with a structure for controlling temperature conditions within the chamber 32. The structure includes insulation 104 interposed within jacket 102, a high precision temperature measuring device 106, and a feedback heat controller 108. Examples of the high precision temperature measuring device include a thermocouple, thermistor, or platinum resistance thermometer. Heat controller 108 is attached to the interior of chamber 32 by leads 110. Electronic heating jacket 102 is shown with feedback control via temperature measuring device 106, which can be a probe, and heat controller 108. Other combinations can be used to control the temperature in chamber 32 such as a vapor heating jacket with pressure control, so long as the temperature can be controlled to within ±2°C, desirably within ±1°C and preferably within ±0.5°C.

Marked-up version showing changes to: Page 6, lines 15-27:

Each thin film formulation is deposited into a vial 24 to provide an array of reaction vials 24. Vial 24 is preferably formed of a rigid material that is chemically inert in the reaction environment. An example of an acceptable vial for many reactions is a glass vial. When dealing with liquids with low vapor pressures or with lengthy reactions, it may be desirable to provide a covering, such as a selectively permeable cap [16] or a septum (not shown) incorporating a feed tube or needle disposed such that a gas is allowed to move freely into and out of vial 24 while depletion of liquid by evaporation is minimized. This arrangement allows an external pressure source to act upon the gas in the reactant environment while evaporation of liquid is limited. In most applications, suitable materials for the cap include polytetrafluoroethylene (PTFE) and expanded PTFE. A suitable cap for use with 2 ml glass vials is "Clear Snap Cap, PTFE/Silicone/PTFE with Starburst, 11mm", part no. 27428, available from Supelco, Inc., Bellefonte, Pennsylvania.

Marked-up version showing changes to: Page 39, insert the following centered heading at top of page:

TABLE 12

Marked-up version showing changes to: Page 39, insert the following successive column headings over the columns, left to right:

Block

<u>M1</u>

M1 amt.

<u>M2</u>

M2 amt.

<u>CS</u>

CS amt.

<u>Pressure</u>

Temperature

<u>Time</u>

TON

Marked-up version showing changes to: Pages 45-47, Table 14 after the table heading, cancel entirely and replace by the following.

Source	<u>DF</u>	Seq SS	<u>Adj SS</u>	<u>Adj MS</u>	F Ratio	<u>P</u>	Significant at P<0.01
M1 amt	1	<u>16412</u>	<u>16412</u>	<u>16412</u>	<u>0.201</u>	0.654	
M2 amt	<u>1</u>	<u>77926</u>	<u>77926</u>	<u>77926</u>	<u>0.954</u>	<u>0.329</u>	
CS amt	<u>1</u>	<u>33586</u>	<u>33586</u>	<u>33586</u>	<u>0.411</u>	<u>0.522</u>	
Pressure	<u>1</u>	<u>4616039</u>	<u>4616039</u>	<u>4616039</u>	<u>56.526</u>	<u>0.000</u>	<u>YES</u>
<u>Temperature</u>	<u>1</u>	<u>216802139</u>	<u>216802139</u>	<u>216802139</u>	<u> 2654.854</u>	0.000	<u>YES</u>
-		_					

<u>Time</u>	1	31205785	31205785	31205785	<u>382.131</u> <u>0.000</u>	YES
$\overline{M1}$	$\overline{1}$	22404811	22404811	22404811	$\overline{274.358}$ $\overline{0.000}$	YES
<u>M2</u>	1 1 1	182205	182205	182205	$\frac{2.231}{0.136}$	
<u>CS</u>	$\overline{1}$	3702	3702	3702	0.045 0.832	
M1 amt*M2 amt	<u>1</u>	27036	27036	2 7036	0.331 0.565	
M1 amt*CS amt	1	58292	58292	<u>58292</u>	$\frac{0.531}{0.714} \frac{0.399}{0.399}$	
M1 amt*Pressure	<u>+</u> 1	61467	<u>50252</u> 61467	<u>61467</u>	$\frac{0.714}{0.753}$ $\frac{0.386}{0.386}$	
M1 amt*Temperature	1	26926	<u>26926</u>	26926	0.330 0.566	
M1 amt*Time	1 1 1 1	110415	110415	110415	1.352 <u>0.366</u>	
	1	34335		34335	$\frac{1.332}{0.420}$ $\frac{0.240}{0.517}$	
M1 amt*M1	<u> </u>		<u>34335</u>			
M1 amt*M2	1	<u>232680</u>	<u>232680</u>	<u>232680</u>	2.849 0.092	
M1 amt*CS	1	<u>260446</u>	<u>260446</u>	<u>260446</u>	3.189 <u>0.075</u>	
M2 amt*CS amt	1	<u>79627</u>	<u>79627</u>	<u>79627</u>	<u>0.975</u> <u>0.324</u>	
M2 amt*Pressure	1	<u>341447</u>	<u>341447</u>	<u>341447</u>	$\frac{4.181}{2.000}$ $\frac{0.042}{2.000}$	
M2 amt*Temperature	<u>1</u>	<u>477</u>	<u>477</u>	<u>477</u>	<u>0.006</u> <u>0.939</u>	
M2 amt*Time	<u>1</u>	<u>125869</u>	<u>125869</u>	<u>125869</u>	<u>1.541</u> <u>0.215</u>	
M2 amt*M1	1	<u>14190</u>	<u>14190</u>	<u>14190</u>	<u>0.174</u>	
<u>M2 amt*M2</u>	<u>1</u>	<u>81553</u>	<u>81553</u>	<u>81553</u>	<u>0.999</u> <u>0.318</u>	
M2 amt*CS	<u>1</u>	<u>8125</u>	<u>8125</u>	<u>8125</u>	<u>0.099</u> <u>0.753</u>	
CS amt*Pressure	<u>1</u>	<u>33749</u>	<u>33749</u>	<u>33749</u>	<u>0.413</u> <u>0.521</u>	
CS amt*Temperature	$\overline{1}$	295416	295416	<u> 295416</u>	<u>3.618</u> <u>0.058</u>	
CS amt*Time	$\overline{1}$	7438	7438	7438	0.091 0.763	
CS amt*M1	$\overline{1}$	$13\overline{2568}$	$13\overline{2568}$	$13\overline{2568}$	$\overline{1.623}$ $\overline{0.203}$	
CS amt*M2	<u>-</u>	<u>37280</u>	37280	<u>37280</u>	0.457 0.500	
CS amt*CS	1	23702	23702	23702	0.290 0.590	
Pressure*Temperature	1	40272	$\frac{23702}{40272}$	40272	0.493 0.483	
Pressure*Time	1	38	38	38	$\frac{0.195}{0.000} \frac{0.105}{0.983}$	
Pressure*M1	1	<u>253770</u>	2 <u>53770</u>	253770	$\frac{0.000}{3.108} \frac{0.903}{0.079}$	
Pressure*M2	<u> </u>	260899	260899	260899	$\frac{3.108}{3.195} \frac{0.075}{0.075}$	
Pressure*CS	1	<u>200899</u> 11954	<u>200899</u> <u>11954</u>	<u>200899</u> <u>11954</u>	$\frac{0.146}{0.702}$	
	1		33291520	33291520	<u>0.140</u> <u>0.702</u> <u>407.672</u> <u>0.000</u>	VEC
Temperature*Time	<u> </u>	33291520				<u>YES</u>
Temperature*M1	$\frac{1}{1}$	43430	43430	43430	<u>0.532</u> <u>0.466</u>	
Temperature*M2	1	<u>94767</u>	<u>94767</u>	<u>94767</u>	<u>1.160</u> <u>0.282</u>	
Temperature*CS		90412	90412	90412	<u>1.107</u> <u>0.293</u>	
Time*M1	Ī	<u>1491</u>	<u>1491</u>	<u>1491</u>	<u>0.018</u> <u>0.893</u>	
Time*M2	<u>1</u>	<u>93605</u>	<u>93605</u>	<u>93605</u>	<u>1.146</u> <u>0.285</u>	
Time*CS	<u>1</u>	. <u>76043</u>	<u>76043</u>	<u>76043</u>	<u>0.931</u> <u>0.335</u>	
<u>M1*M2</u>	<u>1</u>	<u>77799</u>	<u>77799</u>	<u>77799</u>	<u>0.953</u> <u>0.330</u>	
<u>M1*CS</u>	<u>1</u>	<u>169760</u>	<u>169760</u>	<u>169760</u>	<u>2.079</u> <u>0.150</u>	
M2*CS	<u>1</u>	<u>407136</u>	<u>407136</u>	<u>407136</u>	<u>4.986</u> <u>0.026</u>	
M1 amt*M2 amt*CS amt	<u>1</u>	<u>361079</u>	<u>361079</u>	<u>361079</u>	<u>4.422</u> <u>0.036</u>	
M1 amt*M2 amt*Pressure	1 1 1 1 1 1 1 1	<u>21432</u>	<u>21432</u>	<u>21432</u>	<u>0.262</u> <u>0.609</u>	
M1 amt*M2	1	271	<u>271</u>	<u>271</u>	<u>0.003</u> <u>0.954</u>	
amt*Temperature	_					
M1 amt*M2 amt*Time	1	<u>13991</u>	13991	<u>13991</u>	<u>0.171</u> <u>0.679</u>	
M1 amt*M2 amt*M1	<u>1</u> 1	281433	281433	281433	$\frac{3.446}{0.064}$	
M1 amt*M2 amt*M2	1	1	1	<u>1</u>	0.000 0.997	
Will TVID WILL IVID	-	-	_	±	<u> </u>	

M1 amt*M2 amt*CS M1 amt*CS amt*Pressure	<u>1</u> <u>1</u>	116073 114627	116073 114627	116073 114627	1.421 <u>0.234</u> 1.404 <u>0.237</u>
M1 amt*CS amt Tressure	<u>1</u> 1	466	466	466	0.006 0.940
amt*Temperature	-	100	<u></u>	<u> 100</u>	0.000 0.2.10
M1 amt*CS amt*Time	<u>1</u>	<u>69157</u>	<u>69157</u>	<u>69157</u>	0.847 0.358
M1 amt*CS amt*M1	<u>1</u>	164860	164860	164860	2.019 0.156
M1 amt*CS amt*M2	<u>1</u>	<u>14698</u>	<u>14698</u>	<u>14698</u>	<u>0.180</u> <u>0.672</u>
M1 amt*CS amt*CS	1 1 1	<u>334131</u>	<u>334131</u>	<u>334131</u>	<u>4.092</u> <u>0.044</u>
<u>M1</u>	<u>1</u>	<u>235</u>	<u>235</u>	<u>235</u>	<u>0.003</u> <u>0.957</u>
amt*Pressure*Temperature		4.5=000	1 (000	1.55000	0.055 0.150
M1 amt*Pressure*Time	1	<u>167809</u>	167809	<u>167809</u>	<u>2.055</u> <u>0.153</u>
M1 amt*Pressure*M1	1 1 1	<u>8172</u>	8172	<u>8172</u>	<u>0.100</u> <u>0.752</u>
M1 amt*Pressure*M2	1	4377	4377	<u>4377</u>	0.054 0.817
M1 amt*Pressure*CS	1	6356	6356 67161	<u>6356</u> 67161	$\begin{array}{cc} 0.078 & 0.780 \\ 0.822 & 0.365 \end{array}$
M1	<u>1</u>	<u>67161</u>	<u>67161</u>	<u>07101</u>	0.822 0.303
amt*Temperature*Time M1 amt*Temperature*M1	1	194664	194664	194664	2.384 0.123
M1 amt*Temperature*M2	<u> </u>	<u>194004</u> <u>569</u>	<u>154004</u> 569	<u>194004</u> <u>569</u>	<u>2.384</u> <u>0.123</u> <u>0.007</u> <u>0.934</u>
M1 amt*Temperature*CS	1	11	11	11	0.000 0.991
M1 amt*Time*M1	1	6489	6489	6489	0.079 0.778
M1 amt*Time*M2	1	30862	30862	30862	0.378 0.539
M1 amt*Time*CS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	163612	163612	163612	$\frac{2.004}{0.158}$
M1 amt*M1*M2	$\overline{1}$	77397	77397	77397	0.948 0.331
M1 amt*M1*CS	$\overline{1}$	$\overline{11421}$	$\overline{11421}$	$\overline{11421}$	0.140 0.709
M1 amt*M2*CS	<u>1</u>	59409	<u>59409</u>	<u>59409</u>	<u>0.727</u> <u>0.394</u>
M2 amt*CS amt*Pressure	<u>1</u>	<u>6344</u>	<u>6344</u>	<u>6344</u>	<u>0.078</u> <u>0.781</u>
M2 amt*CS	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0.000</u> <u>1.000</u>
amt*Temperature					
M2 amt*CS amt*Time	1	<u>70019</u>	<u>70019</u>	<u>70019</u>	<u>0.857</u> <u>0.355</u>
M2 amt*CS amt*M1	$\frac{1}{1}$	<u>89887</u>	<u>89887</u>	<u>89887</u>	<u>1.101</u> <u>0.295</u>
M2 amt*CS amt*M2	<u>ļ</u>	120523	<u>120523</u>	<u>120523</u>	1.476 <u>0.225</u>
M2 amt*CS amt*CS	1	8479	8479	8479	0.104 0.747
M2	<u>1</u> .	<u>190090</u>	<u>190090</u>	<u>190090</u>	<u>2.328</u> <u>0.128</u>
amt*Pressure*Temperature M2 amt*Pressure*Time	1	14716	14716	<u>14716</u>	0.180 0.671
M2 amt*Pressure*M1	1 1 1 1	7373	7373	7373	0.090 0.764
M2 amt*Pressure*M2	<u> </u>	16357	163 <u>57</u>	16357	0.200 0.655
M2 amt*Pressure*CS	1	$\frac{10937}{35027}$	35027	35027	0.429 0.513
M2	1	26831	26831	26831	0.329 0.567
amt*Temperature*Time	_				
M2 amt*Temperature*M1	1	<u>626</u>	<u>626</u>	<u>626</u>	0.008 0.930
M2 amt*Temperature*M2	<u>1</u>	94448	<u>94448</u>	<u>94448</u>	<u>1.157</u> <u>0.283</u>
M2 amt*Temperature*CS	<u>1</u>	<u>1212</u>	<u>1212</u>	<u>1212</u>	<u>0.015</u> <u>0.903</u>
M2 amt*Time*M1	1 1 1 1 1 1	<u>77055</u>	<u>77055</u>	<u>77055</u>	<u>0.944</u> <u>0.332</u>
M2 amt*Time*M2	1	<u>6233</u>	<u>6233</u>	<u>6233</u>	<u>0.076</u> <u>0.782</u>
M2 amt*Time*CS	1	<u>337817</u>	337817	<u>337817</u>	4.137 0.043
M2 amt*M1*M2	<u>1</u>	<u>38653</u>	<u>38653</u>	<u>38653</u>	<u>0.473</u> <u>0.492</u>

M2 amt*M1*CS	1	<u>23751</u>	<u>23751</u>	<u>23751</u>		0.590	
M2 amt*M2*CS	1 1 1	<u>3270</u>	<u>3270</u>	<u>3270</u>		<u>0.842</u>	
<u>CS</u>	<u>1</u>	<u>84561</u>	<u>84561</u>	<u>84561</u>	<u>1.035</u>	<u>0.310</u>	
amt*Pressure*Temperature							
CS amt*Pressure*Time	<u>1</u>	<u>212868</u>	<u>212868</u>	<u>212868</u>		<u>0.107</u>	
CS amt*Pressure*M1	1 1 1 1	<u>34495</u>	<u>34495</u>	<u>34495</u>	<u>0.422</u>	<u>0.516</u>	
CS amt*Pressure*M2	<u>1</u>	<u>20299</u>	<u> 20299</u>	<u>20299</u>	<u>0.249</u>	<u>0.618</u>	
CS amt*Pressure*CS	<u>1</u>	<u>12034</u>	<u>12034</u>	<u>12034</u>	<u>0.147</u>	<u>0.701</u>	
<u>CS</u>	1	<u>174636</u>	174636	<u>174636</u>	2.139	0.144	
amt*Temperature*Time							
CS amt*Temperature*M1	1	535239896	535239896	535239896	6554.288	0.000	YES
CS amt*Temperature*M2	$\overline{1}$	4708	4708	4708		0.810	
CS amt*Temperature*CS	$\overline{1}$	331	331	331		0.949	
CS amt*Time*M1	$\overline{1}$	$112\overline{874}$	$112\overline{874}$	$112\overline{874}$		0.240	
CS amt*Time*M2	$\bar{1}$	1469	1469	1469		0.893	
CS amt*Time*CS	1 1 1 1 1 1 1	804	804	804		0.921	
CS amt*M1*M2	1	75785	75785	75785		0.336	
CS amt*M1*CS	1	22036	22036	22036		0.604	
CS amt*M2*CS	î	34743	34743	34743		0.515	
Pressure*Temperature*Ti	1	950930	950930	950930		0.001	YES
me	-	20000	<u> </u>	220220	11.0.13	0.001	125
Pressure*Temperature*M1	1	182 <u>26</u>	18226	18226	0.223	0.637	
Pressure*Temperature*M2	<u>1</u>	11544	11544	11544		0.707	
Pressure*Temperature*CS	1	67428	67428	<u>67428</u>		0.364	
Pressure*Time*M1	1	<u>310071</u>	<u>310071</u>	310071		$\frac{0.051}{0.052}$	
Pressure*Time*M2	1	10784	10784	10784		0.717	
Pressure*Time*CS	1	2008	2008	2008		0.875	
Pressure*M1*M2	<u> </u>	12343	12343	12343		0.698	
Pressure*M1*CS	<u> </u>	14220	$\frac{12343}{14220}$	14220		0.677	
Pressure*M2*CS	<u> </u>	67936	67936	67936	· · · · · · · · · · · · · · · · · · ·	0.362	
Temperature*Time*M1	<u>↓</u> 1	221695	2 <u>21695</u>	<u>221695</u>		0.100	
Temperature*Time*M2	1 1 1 1 1 1 1 1	38	38	38		0.983	
	1	<u>38</u> <u>10</u>	<u> 38</u> <u>10</u>	<u> 10</u>		0.991	
Temperature*Time*CS	1	<u>10</u> 24040	<u>24040</u>	<u>24040</u>	0.000		
Temperature*M1*M2	<u> </u>		257092	2 <u>57092</u>	3.148		
Temperature*M1*CS	<u> </u>	<u>257092</u>		· · · · · · · · · · · · · · · · · · ·	$\frac{5.148}{0.010}$		
Temperature*M2*CS	<u> </u>	<u>848</u>	<u>848</u>	<u>848</u>	0.653		
<u>Time*M1*M2</u>	<u> </u>	<u>53303</u>	53303	<u>53303</u>	0.633 0.540		
Time*M1*CS	<u> </u>	<u>44080</u>	44080	44080			
Time*M2*CS	1 1 1 1 1	<u>7295</u>	7295	7295	<u>0.089</u>		
$\frac{M1*M2*CS}{F}$	_	<u>319669</u>	<u>319669</u>	319669	<u>3.915</u>	<u>0.049</u>	
Error	<u>382</u>	31195094	<u>31195094</u>	<u>81662.55</u>			
<u>Total</u>	<u>511</u>	<u>885328201</u>					